

REMARKS

These remarks are submitted the same day as and relate to a continuation-in-part application having attorney docket number 08CN8824-4. Collectively, these remarks and the continuation-in-part application are intended to address the 26 March 2002 Office Action for U.S. Application Serial No. 09/539,067 (hereinafter "the '067 application"), filed 30 March 2000. It is hoped that the remarks will facilitate and expedite the Examiner's response to the continuation-in-part application.

Claims 1-8, 10-20, and 22-28 were pending in the '067 application and correspond, respectively, to Claims 1-26 of the new continuation-in-part application. Compared to independent Claims 1, 19, and 20 of the '067 application, on which they are based, independent Claims 1, 18, and 19 of the present continuation-in-part have substituted the limitation - - wherein the blend has a percent transmittance after molding of at least about 35% measured at 1/8 inch thickness - - for the limitation "wherein the blend is transparent". Other than renumbering to skip canceled Claims 9 and 21, no other changes have been made to the claims.

Compared to the specification of the '067 application, the following changes have been made to the specification of the continuation-in-part application.

At the end of paragraph number [0030] (corresponding to the paragraph on page 10, lines 1-5 of the '067 application), the following sentence has been added: "In one embodiment, the composition after molding has a percent transmittance of at least 35%, preferably at least about 40%, more preferably at least about 50%, measured on a 1/8 inch thick sample using a cold white fluorescent light source."

Table 1 has been expanded to include components used to prepare new Examples 16 and 17.

A description of percent transmittance measurements has been added to paragraph number [0035] (corresponding to the paragraph on page 11, lines 13-21 of the '067



application).

Tables 2 and 3 have been expanded to include percent transmission values.

Examples 16 and 17 have been added, and they are summarized in new Table 4.

Claim Re ections Under 35 U.S.C. § 112, First Paragraph

In the 26 March 2002 office action for the '067 application, Claims 1-8, 10-20, and 22-28 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in relevant art that the inventors, at the time the applications was filed, had possession of the claimed invention.

The 3/26/02 Office Action stated that "[a] blend, i.e. a composition, cannot be transparent, translucent or opaque. Only an article can have those properties." (3/26/02 Office Action, page 2, paragraph 2.)

Applicants note that Claims 1, 18, and 19 of the present continuation-in-part application include the limitation - wherein the blend has a percent transmittance after molding of at least about 35% measured at 1/8 inch thickness - . Applicants respectfully assert that it is conventional to include property limitations in composition claims, even when the determination of a property value requires the creation and testing of an article formed from the composition. For example, in U.S. Patent No. 6,391,960 B1, on which the present examiner is listed, claim 1 is directed to a hot melt adhesive composition, and dependent claim 8 further limits the claim 1 adhesive composition with the property limitation of "a stiffness less than 15×10 5 dyne/cm 2 at 40° C". The specification of this patent makes clear that the determination of the stiffness value requires the preparation of an article comprising the composition. In particular, a disc-shaped article must be prepared to fit between the parallel plates of the dynamic mechanical analyzer used to determine stiffness (see column 9, line 40 to column 10, line 14).

In summary, Applicants respectfully assert that the claims of the continuation-in-part



application do <u>not</u> contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in relevant art that the inventors, at the time the applications was filed, had possession of the claimed invention.

Claim Re ection Under 35 U.S.C. §§ 102 and 103 Over Ostermayer, Burnell, and Hellstern-Burnell

In the 26 March 2002 office action for the '067 application, Claims 1, 3, 5-8, 12, 14-16, 18-20 and 22-27 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Patent No 4,948,832 to Ostermayer et al. ("Ostermayer"). Claims 1-8, 10-12, 14-20, and 22-27 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Patent No. 6,165,309 to Burnell et al. ("Burnell"). Claims 1-8, 10-20, and 22-28 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Burnell in view of U.S. Patent No. 5,294,654 to Hellstern-Burnell et al. ("Hellstern-Burnell"). Claims 1-8, 10-16, 18-20, and 22-28 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Ostermayer in view of Hellstern-Burnell.

According to the abstract, Ostermayer generally describes reinforced thermoplastic molding materials containing, as essential components, (A) from 40 to 94 parts by weight of a polymer component of (a₁) from 10 to 90% by weight of polyphenylene ether and (a₂) from 10 to 90% by weight, based in each case on A, of a styrene polymer toughened with an acrylate rubber or with an unhydrogenated or hydrogenated polymer of a conjugated dieme, (B) from 1 to 20 parts by weight of a copolymer of (b₁) from 70 to 99.9% by weight of a monomer from the group consisting of styrene, alpha-methylstyrene and styrene alkylated in the nucleus or a mixture of these monomers, (b₂) from 0.1 to 30% by weight of one or more compounds from the group consisting of tert-butyl acrylate and tert-butyl methacrylate, or one or more compounds from the group of compounds of the general formula I:

$$H_{2}C = C - SiR^{2}R^{3}R^{4}$$

where R is hydrogen or methyl and R², R³ and R⁴ are each an alkyl or alkoxy group of not more than 4 carbon atoms, or of the general formula II:

$$\begin{array}{c|c}
R^1 & O \\
 & \parallel \\
 & \parallel \\
C & C & C & O & (CH_2)_n & SiR^5R^6R^7
\end{array}$$

where n is an integer from 1 to 4 and R^5 , R^6 and R^7 are each one of the radicals stated for R^2 or are each --O(CH₂ -- CH₂ --O)_m R^8 , where R^8 is C₁-C₄-alkyl and m is 1, 2, 3 or 4, and (b₃) from 0 to 10% by weight, based on the copolymer, of a further ethylenically unsaturated monomer that is copolymerizable with b₁ and b₂, and (C) from 5 to 50 parts by weight of a reinforcing agent, the number of parts by weight being based on 100 parts by weight of the sum of A, B and C.

Burnell generally describes a method for improving the adhesion between a conductive laminate and a substrate material. In an embodiment, the conductive laminate is a copper film and the substrate material comprises polyphenylene ether resin. The method involves admixing a copolymer of a vinyl aromatic compound and an alpha, beta-unsaturated cyclic anhydride with the polyphenylene ether resin. The copolymer of a vinyl aromatic compound and an alpha, beta-unsaturated cyclic anhydride is preferably a polystyrene maleic anhydride copolymer or a rubber modified polystyrene maleic anhydride copolymer.

Hellstern-Burnell generally describes a composition comprising a polyphenylene ether, polystyrene, glass fibers, inorganic nonfibrous agents, carbon fibers or metal-coated graphite fibers, and certain disphosphate- or polyphosphate-based flame retardants.

Applicants respectfully assert that Claims 1-25 of the continuation-in-part application are patentable over Ostermayer, Burnell, and Hellstern-Burnell. Each of Applicants' independent claims (Claims 1, 18, and 19) include the limitation that "the blend has a percent



transmittunce after molding of at least about 35% measured at 1/8 inch thickness". Tables 2 and 3 have been expanded to include the results of percent transmittance measurements made at the time of other property measurements reported in the '067 application. These values range from 34.81 to 85.10% for inventive samples.

As previously noted, there is no express teaching in either Ostermayer or Burnell that their compositions would meet Applicants' limitation of a percent transmission of at least about 35'6 measured at 1/8 inch thickness. Applicants also respectfully maintain their assertion that such a limitation is not inherently met by Ostermayer or Burnell. Examples 16 and 17 and Table 4 have been included in the continuation-in-part application to show that the compositions closely approximating Ostermayer Example 4 and Burnell Example 5 do not satisfy Applicants' percent transmittance limitation. These reference examples were selected as the closest specific compositions within the references, and they were completely opaque at 1/8 inch thickness, giving percent transmittance values of 0.00%. Applicants note that these results are consistent with the assertions of the Adedeji declaration, filed 5 Novembur 2001.

Applicants respectfully disagree with the Examiner's assertion that

a showing that some of, or even most of, the composition show by the prior art of record are opaque, does not overcome an anticipation rejection. Applicants would have to prove that all compositions encompassed by the cited references are opaque or translucent.

(26 March 2002 Office Action for '067 Application, page 4.) To the contrary, it is the Examiner's obligation to "provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art". Ex parte Levy, 17 U.S.P.Q.2d 1461, 1464 (U.S.P.T.C). Bd. Pat. App & Int. 1990). Such a basis has not been provided. Furthermore, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). The only way to determine whether a particular percent transmittance



is necessarily present is to prepare and test specific compositions, and the only specific compositions in Ostermayer and Burnell are found in the working examples. Applicants: have prepared and tested two of these compositions and determined that they are opaque, i.e., they do not remotely meet Applicants' percent transmittance limitation. Applicants respectfully assert that they do not have the burden to prepare and test a number of samples commensurate with the entirety of the composition spaces described by Ostermayer and Burnell. Given the number of required components, optional components, and possible species for each component in these references, thousands of tests would be insufficient. Moreover, Applicants are not required to compare their invention with subject matter (e.g., hypothetical compositions) that does not exist in the prior art. In re Geiger, 2 USPQ2d 1276, 1279 (Fe l. Cir. 1987). Applicants believe they have discharged their burden by testing the reference compositions most closely related to Applicants' claimed compositions.

The Examiner has further stated that

[t] he instant specification shows fillers, namely silicates, titanium dioxide, filters, glass fibers, carbon black, graphite, calcium carbonate, talc and mica on page 9, lines 7-10. Accordingly, these fillers apparently do not interfere with transparency.

(26 March 2002 Office Action for '067 application, page 3.) Applicants respectfully note that they are not prohibited from claiming less than they disclose. To the extent that the inclusion of such fillers prevents the compositions from meeting the percent transmittance limitation, they are excluded from the claimed compositions. Applicants strongly deny any allegation that they admitted that fillers do not interfere with transparency. To the contrary, Applicants recognize, as do those of ordinary skill in the art, that such fillers usually have particle dimensions greater than the wavelength of light and therefore detract from transparency.

So, Ostermayer and Burnell do no teach or suggest Applicants' Claim 1, 18, and 19 transparency limitation. The combination of either reference with Hellstern-Burnell does not



remedy this deficiency. Hellstern-Burnell generally describes a thermoplastic composition, comprising: a) polyphenylene ether resin; b) at least one polystyrene resin; c) about 3% by weight to about 30% by weight glass fibers, based on the weight of the entire composition; d) an effective amount of at least one inorganic, nonfibrous agent which dimensionally-stabilizes molded or extruded parts formed from the composition; e) about 5% by weight to about 15% by weight, based on the weight of the entire composition, of a carbon-based material selected from the group consisting of carbon fibers and metal-coated graphite fibers; and f) about 9% by weight to about 22% by weight, based on the weight of the entire composition, of a diphosphate- or polyphosphate- based flame retardant (column 2, lines 4-21). Those of ordinary skill in the art recognize that the glass fibers, non-fibrous agent, and, particularly, the carbon-based material required by Hellstern-Burnell render the compositions opaque. There is thus no basis for an assertion that the Hellstern-Burnell compositions racet Applicants' percent transmittance limitation, and no possibility of using Hellstern-Burnell to remedy the deficiencies of Ostermayer and Burnell.

In summary, Claims 1-26 of Applicants' continuation-in-part application are patentable over any combination of Ostermayer, Burnell, and Hellstern-Burnell because Applicants' claimed compositions have percent transmittances of at least 35% and that limitation is not taught, suggested, or inherent in any of the references.



It is believed that the foregoing remarks and the claims of the continuation-in-part application fully address the issues raised in 26 March 2002 Office Action of the '067 application and that the claims presented in the continuation-in-part application should be allowable to Applicants.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 07-0862 maintained by Assignee.

Respectfully submitted,

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